

# PATENT ABSTRACTS OF JAPAN

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## (54) SPEECH COMPANDING DEVICE AND METHOD THEREFOR

### (57)Abstract:

PROBLEM TO BE SOLVED: To provide a speech companding device capable of achieving a high compression rate and also compressing and expanding speech with a good reproducibility of speech information.

SOLUTION: By dividing a digital speech signal into eight channels of equal bands in a band dividing part 12, time-dividing each band divided in a judging part 13 each prescribed time, and detecting speech signal energy of each time- divided band, only the sections of which detected energy exceeds a prescribed threshold is adopted as subject to quantization. Then by judging whether or not the energy of each divided channel subject to the quantization section is 5% or more of the total energy of all channels in the section, a quantization part 14 reads out mapping data corresponding to the input signal from a table which is different depending on a high amplitude or a low amplitude referring to a mapping table 15 in which calculation result of pre-calculated input-to-error is registered, and quantizes only the speech signals of the bands judged as 5% or more.

In the case of expanding, the expansion processing is performed with this data in reverse order.

